

Please carefully read and save these instructions before attempting to assemble, maintain, install, or operate this product. Observe all safety information to protect yourself and others. Failure to observe the instructions may result in property damage and/or personal injury. Please keep instructions for future reference.

Important Operating Instructions



60 GALLON COMPRESSOR

Model: 51850, 52332

CALIFORNIA PROPOSITION 65

WARNING: You can create dust when you cut, sand, drill or grind materials such as wood, paint, metal, concrete, cement, or other masonry. This dust often contains chemicals known to cause cancer, birth defects, or other reproductive harm. Wear protective gear.

WARNING: This product or its power cord may contain chemicals, including lead, known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

CAUTION:

FOR YOUR OWN SAFETY READ INSTRUCTION MANUAL COMPLETELY AND CAREFULLY BEFORE OPERATING THIS COMPRESSOR.

Failure to follow all instructions as listed below may result in electrical shock, fire, and/or serious personal injury.

Breathable Air Warning:

This compressor/pump is not equipped and should not be used "as is" to supply breathing quality air. For any application of air for human consumption, the air compressor/pump will need to be fitted with suitable in-line safety and alarm equipment. This additional equipment is necessary to properly filter and purify the air to meet minimal specifications for Grade D breathing as described in Compressed Gas Association Commodity Specification G 7.1 - 1966, OSHA 29 CFR 1910. 134, and/or Canadian Standards Associations (CSA).

SPECIFICATIONS:

Tank Size: 60 gallons
CFM: 11.5 @ 40PSI;
10.2 @ 90 PSI
Horsepower (Running): 3HP
Max Pressure: 135 PSI
Thermal overload protection

SAFETY WARNINGS

- 1) Follow all electrical and safety codes along with National Electrical Codes (NEC) and Occupational Safety and Health Act (OSHA).
- 2) Electric motors and starters must be securely and properly grounded.
- 3) Do not allow the cable to come into contact with oil, grease, chemicals or sharp objects. Do not allow kinks to form in the cable.
- 4) Do not exceed the pressure limits for any component in or connected to the system.
- 5) Inspect the compressor to make sure that all the fittings, bolts, etc., are tight and secure before starting the compressor.
- 6) Do not touch the compressor or motor while it is in operation. These parts become HOT during

For warranty purchases, please keep your dated proof of purchase. File or attach to the manual for safekeeping.

normal operation. Allow the unit to cool completely before performing maintenance or repairs.

7) Do not increase the settings on control components. These settings provide safety against over pressurization. The pressure switch settings are preset at the factory for normal operating conditions and increasing the settings will result in compressor and motor damage.

8) Regularly inspect the hoses, plugs, fittings, piping, wires, etc., for signs of damage, weakness or leakage before starting and using the compressor.

9) Fast moving air can stir up dust and debris, which may be harmful. Release the air slowly when draining moisture or depressurizing the unit.

10) Tanks rust and weaken with moisture. Ensure the tank is drained daily to avoid rust formation.

11) Inspect the air tank for rust, pin holes, cracks (especially in rear welds), bulges and other changes in the tank.

12) Never weld or drill holes in the air tank.

13) Keep others at a safe distance from the work area.

SPRAYING PRECAUTIONS

1) Always wear a respirator and safety glasses when spraying.

2) Always spray in an open, well-ventilated area to prevent fumes from accumulating and causing fire and health hazards. Fumes are dangerous.

3) Do not spray materials near open flames and electrical equipment.

4) Do not smoke while spraying insecticides, paint or other flammable substances.

5) Do not direct paint or other sprayed material at the compressor. Make sure the compressor is as far away from the spraying area as possible to minimize overspray accumulation on the compressor.

6) When spraying solvents or chemicals, follow the instructions that are provided by the manufacturer.

7) Never use air pressurized accessories or parts in the air system that are not suitable for 135 PSI.

When high humidity is present or when a compressor is used for an extended period of time, moisture will collect in the tank. This condensation can cause water droplets to appear in paint that is sprayed. To

eliminate this moisture, drain the tank often to reduce the buildup. A filter in the air line can help eliminate this moisture when it is located as near to the gun as possible.

MAINTENANCE

Before starting maintenance, ensure the air compressor is turned off, disconnected from the power source, the tank is drained and the compressor is cooled down completely.

Daily:

- Check oil level
- Drain accumulated liquid from tank
- Check for oil leaks
- Check for unusual noise and/or vibrations
- Check all fasteners are secure

Weekly:

- Check safety relief valve
- Inspect and clean air filter
- Clean breather holes on oil check dipstick

Monthly:

- Check for air leaks by applying a solution of soapy water around joints. Look for air bubbles around joints when the compressor reaches the pressure cut-out limit and pump turns off.
- Check all nuts and bolts are tight
- Check V-Belts for proper tension.

-Check Compressor pulley and motor are aligned and securely fastened.

Three months or 300 operating hours:

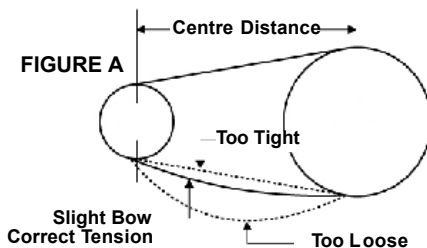
- Change compressor oil (SAE 20 or 30)

Replace oil more frequently when used in dusty operating environments.

Initial Oil Change Due at 100 Hours.

Checking Belt Tension (if belt driven)

Adjust belt(s) so when pressure is applied at the center, there is approximately 1/2" slack



If the belt is installed too tight, the motor may get overloaded. This will cause the motor to overheat. If the belt is installed too loosely, it will slip and excessive wear and vibration will occur.

How to Install a New Belt if Required

- 1) Disconnect power supply.
- 2) Remove belt guard.
- 3) Loosen motor bolts and slide motor toward compressor head just enough to allow old belt to be removed.
- 4) Install proper replacement belt.
- 5) Slide motor away from compressor head to provide recommended tension as shown in Figure A.
- 6) Align belt using a straight edge ruler against pulley's edge.
- 7) Fasten motor bolts.
- 8) Ensure motor and compressor pulley's are secure. Re-check alignment.
- 9) Re-install belt guard and reconnect power supply.
- 10) Belt tension should be checked after 20 hours of operation. Check tension monthly thereafter.

Troubleshooting Guide

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Will not start	Incorrect power supply and/or wiring.	Make sure power is turned on. (Consult with a licensed electrician).
	Air receiver is at full pressure.	Drain air receiver.
Low pressure	Safety valve leaks.	Replace safety valve.
	Drain cock open.	Close drain cock.
	Loose tubes or fittings.	Tighten fittings.
	Dirty or plugged air filter.	Clean or replace as necessary.
	Defective unloader valve.	Replace unloader valve.
Oil in discharge	Too much oil in the crank-case.	Drain oil and fill to proper level.
	Improper oil viscosity.	drain and replace oil
	Compressor overheated.	Air pressure regulated too high.
	Restricted air filter.	Clean or replace air filter.
	Worn piston rings.	Replace piston rings.
Compressor overheats	Dirty compressor head, cylinder or intercooler.	Clean with compressed air.
	Clogged inlet filter.	Clean or replace as necessary.
	Operating pressure too high.	Reduce operating pressure.
	Low oil or wrong oil being used.	Drain and replace oil.
	Compressor cycle too long. Proper cycle is 50-60% on Stop/Start operation.	Allow for longer rest between cycles.
	Leaks in air system.	Check for leaks.
Compressor loads & unloads or stops & starts excessively	Pressure switch differential adjusted too close.	Replace worn components as necessary. Make necessary adjustments.
	Defective compressor valves.	Replace valves.
	Compressor too small for intended use.	Upgrade to larger compressor.

Troubleshooting Guide

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Insufficient output, low discharge pressure	Clogged inlet filter.	Clean or replace as necessary.
	Leaks in air lines, air valves, fittings, etc...	Replace worn components as necessary.
	Drive belts slipping.	Tension V-belts.
	Drain valve left open.	Close drain valve.
	Defective pressure gauge.	Replace pressure gauge.
	Leaking head gasket.	Replace head gasket.
	Dirty or plugged inter cooler tubes.	Remove and clean inter cooler tubes.
	Pressure switch adjusted too low, or defective.	Make necessary adjustments.
	Worn or defective compressor valves.	Replace valves.
	Worn piston, worn out rings.	Replace worn parts.
	Restrictive check valve.	Clean check valve and replace if necessary.
Motor stalls or blows breaker	Faulty check valve.	Replace check valve.
	Valves incorrectly installed	Install valves correctly.
	Drive belts too tight.	Tension V-belts.
	Defective pressure switch.	Replace switch.
	Defective Motor.	Replace Motor. (Consult licensed electrician).
	Power being supplied by generator.	Consult licensed electrician
Water in crankcase oil gets dirty, rusty valves or cylinders	Cycle too short; compressor does not operate long enough to vaporize condensed moisture during compression.	Allow for longer operating cycle.
	System pressure leaking back through check valve when compressor is stopped.	Check and replace check valve if necessary.
	Wrong oil being used.	Drain and replace with proper oil

Troubleshooting Guide

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Excessive vibration / compressor knocks	Loose compressor, motor or engine guard.	Tighten components.
	Compressor not level.	Level compressor
	Feet bolts over tightened to floor.	Loosen feet bolts.
	Excessive discharge pressure.	Reduce operating pressure.
	Wrong oil being used.	Drain and replace with proper oil.
	Loose flywheel, drive, pulley or drive belts.	Tighten loose components and check belts.
	Worn connector rods, wrist pin or main bearings.	Check and replace worn parts.
	Compressor valves loose or broken.	Check and replace worn or broken valves..
	Check valve knocks at low pressure.	Remove and clean check valve.
Compressor uses too much oil	Clogged inlet filter.	Clean inlet filter or replace as necessary.
	Wrong oil being used, wrong viscosity.	Drain and replace oil.
	Oil level too high.	Fill compressor with oil to proper level.
	Crankcase breather valve malfunction.	Replace crankcase breather.
	Compressor runs unloaded too long	Increase load or stop compressor when not needed. Check for air leaks.
	Compressor operating outside in cold conditions or inlet filter not protected against weather.	Provide adequate protection against extreme weather conditions.
	Worn piston rings.	Replace piston rings.